

REMARKS

The outstanding Office Action addresses and rejects claims 1-17, 19-25, and 27-32 and objects to claims 18 and 26. Applicants would like to thank the Examiner for the indication of allowable subject matter in dependent claims 18 and 26. Applicants respectfully request reconsideration of the present application in view of the amendments set forth above and the remarks below.

Claims 17 and 25 have been amended to include all the limitation of dependent claims 18 and 26 respectfully. Applicants therefore believe claims 17 and 25 are in condition for allowance. Claim 1 has been amended to include a socket region in the electrochemical cell that can electrically connect the electrochemical cell and the measuring circuit. Claim 10 has similarly been amended to include a socket region for receiving a tongue. Claims 2, 9, 18, 21, 26, and 29 have been canceled. Support for these amendments can be found throughout the specification and claims. No new matter has been added.

Claim Rejections – 35 U.S.C. § 112

Claim 9 has been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 has been canceled.

Claim Rejections – 35 U.S.C. § 102

The Examiner rejects claims 1-2, 4-11, and 13-16 pursuant to 35 U.S.C. 102(e) as being unpatentable over U.S. Patent No. 5,437,999 to Diebold et al. (“Diebold”). In particular, the Examiner states that Diebold teaches a biosensor for use in determining a concentration of a component in an aqueous liquid sample.

With respect to claims 1-2 and 10-11, the Examiner states that Diebold includes all the limitations of claims 1 and 10, and that the claimed socket region and contact areas are disclosed by elements 41, 45, 9, and 3 in Figure 5. Applicants respectfully disagree.

The present invention includes an electrochemical cell and a measurement circuit. To electrically connect the cell and the circuit, a socket region on the electrochemical cell can receive a tongue. The socket region can be seen in FIG. 14, reference number 20. On either side of the socket, connection regions 21 and 22 are electrically connected to the electrodes of the electrochemical cell.

Diebold fails to teach or disclose the claimed socket region. The reference numbers referred to by the Examiner in the Diebold reference are for cutout portions (9, 45) which expose metallized thin support materials (3, 41). As shown in Fig. 5 of Diebold, the cutout portions are spaced laterally from one another such that they are positioned toward the edges of the strip and there is some open space therebetween. These cutouts do not have the required socket configuration, nor can they receive a tongue plug. The cutouts of Diebold are presumably designed as male adaptors for being received in a female adaptor, unlike the socket region of the present invention that receives a tongue plug.

Applicants therefore believe independent claims 1 and 10 are allowable, and dependent claims 3-8 and 11-16 are allowable at least because they depend from allowable base claims.

Claim Rejections – 35 U.S.C. § 103

The Examiner rejects claims 3 and 12 pursuant to 35 U.S.C. 103(a) as being unpatentable over Diebold in view of U.S. Patent No. 5,282,950 to Dietze et al. ("Dietze"). In particular, Dietze is cited to teach tongue plugs.

Dietze disclose a strip (analysis element) with element contacts 17. The element contacts 17 are received within a plug connector 60 of the evaluation unit 20. Fig. 6 shows the element contacts 17 positioned *within* the plug connector 60.

As stated above, the electrochemical cell of claims 1 and 10 requires a socket region, and the tongue plug of claims 3 and 12 is designed to mate with the socket region. Unlike Dietze, the tongue plug is a male adaptor for insertion *within* the socket region of the electrochemical cell.

Simply because Dietze uses the word “plug” in naming a connector does not mean that the connector has the same structure as the claimed invention.

The Examiner rejects claims 17, 19, 22-25, and 27-32 pursuant to 35 U.S.C. 103(a) as being unpatentable over Diebold in view of U.S. Patent No. 5,388,163 to Elko et al. (“Elko”). In particular, the Examiner states that Diebold teaches an apparatus of determining a concentration of a reduced form or an oxidized form of a redox species in a liquid sample, but Diebold does not disclose whether the working electrode and counter electrode are spaced apart by less than 500 μm . Elko is cited to teach that a MYLAR film as thin as 2 μm was available at the time of the invention and used a backing layer to a conductive layer in forming electrodes. Applicants respectfully disagree with this characterization.

Elko is attempting to improve upon acoustic devices and states that the disclosed electret transducer array is particularly useful in noisy environments where sources of sound to be detected and noise to be rejected are directionally distinct. One piece of the array is a very thin polymer layer. This minimal disclosure of the thin polymer layer in no way suggests that the layer could work in an electrochemical sensor. While Elko may disclose that a thin MYLAR film was available, there is no suggestion that such a film could be or should be used to space the electrodes of Diebold. Simply because a material is available does not provide motivation for use. MYLAR films come in a wide variety of thicknesses, and without hindsight drawn from the Applicants’ specification there is no reason one of ordinary skill in the art would choose MYLAR film having a thickness of less than 500 μm to use as a spacer in Diebold.

In addition, Diebold and Elko represent non-analogous art that cannot be combined. Diebold describes electrochemical sensors for use in testing blood specimens. Alternatively, Elko is directed to electret transducer arrays for use in acoustics, an area of art far removed from testing of biological substances. One of ordinary skill in the art would have no reason to look to the electret transducer array art to find teaching on MYLAR thickness for the device of Diebold. Elko therefore fails to remedy the deficiencies of Diebold.

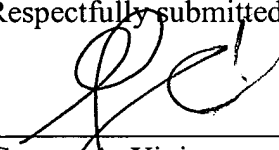
Conclusion

Applicants therefore believe that independent claims 1, 10, 17, and 25 are patentably distinct from the prior art, and dependent claims 3-8, 11-16, 27-28, and 30-32 are allowable at least because they depend from an allowable base claim. Allowance is therefore respectfully requested.

The Examiner is urged to telephone the undersigned Attorney for Applicants in the event that such communication is deemed to expedite allowance of this application.

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Respectfully submitted,



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